

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of)
)
Advanced Television Systems)
and Their Impact upon the)
Existing Television Broadcast)
Service)

MM Docket No. 87-268

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

SUPPLEMENT TO PETITION FOR RECONSIDERATION

WMTW Holdings, Inc. ("Holdings"), licensee of WMTW-TV, Channel 8 (DTV Channel 46), Poland Spring, Maine ("WMTW" or the "Station"), by its attorneys and pursuant to Section 1.106 of the Rules, hereby supplements its Petition for Reconsideration of the *Sixth Report and Order* in the above-captioned proceeding. ^{1/} Holdings, in its Petition for Reconsideration, argued that WMTW's DTV specifications should have incorporated a minor change application that was both unopposed and timely submitted some three months in advance of the July 25, 1996 release of the *Sixth Further Notice of Proposed Rulemaking* (FCC 96-317) in this proceeding. See File No. BPCT-960422KE. As noted in that Petition, incorporating the proposed minor

Noted for filing
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^{1/} *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, Sixth Report and Order*, FCC 97-115 (April 21, 1997) ("*Sixth Report and Order*"). The Commission explicitly provided for this opportunity to supplement petitions for reconsideration in conjunction with the release of OET Bulletin No. 69. See *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, Order*, DA 97-1377 (OET rel. July 2, 1997).

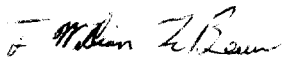
change not only would permit WMTW to move its analog and DTV transmitters to a site nearer the Station's community of license, but also would obviate the likelihood that WMTW would have to abandon its current site on Mount Washington shortly after the DTV conversion period, would allow WMTW to use cleaner and safer means to power its transmitters, and would further the efforts of state governmental authorities and environmental organizations to preserve the natural beauty of Mount Washington.

A recently completed technical study, which was conducted in accord with the methods of OET Bulletin No. 69, has now identified yet another benefit to the proposed revision. As described at length in the attached study, the new transmitter site, though it may marginally increase the total area that might receive interference from WMTW's DTV operations, nonetheless *reduces* the total number of people projected to experience interference by almost 50,000. This clear reduction in the extent of interference suffered by the region's population confirms that the Commission should revise WMTW's DTV designations to reflect the minor change request.

In light of the results of the attached technical study and the many other benefits of incorporating the timely minor change application into WMTW's DTV specifications, Holdings requests the necessary revision to the *Sixth Report and Order*.

Respectfully submitted,

WMTW HOLDINGS, INC.

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Dated: August 22, 1997

**ENGINEERING STATEMENT
IN FURTHER SUPPORT OF
A PETITION FOR RECONSIDERATION
MASS MEDIA DOCKET NUMBER 87-268
WMTW HOLDINGS CORP.
STATION WMTW-TV
POLAND SPRING, MAINE**

This engineering statement has been prepared on behalf of WMTW Holdings Corp. (WMTW) in further support of a Petition for Reconsideration in Federal Communications Commission (FCC) Mass Media (MM) Docket Number 87-268 requesting modification of the reference coordinates, effective radiated power (ERP), and antenna radiation center height above average terrain (HAAT) for the DTV channel 46 allotment made in the *Sixth Report and Order* in the above referenced docket for use by its station WMTW-TV, Poland Spring, Maine.

The *Sixth Report and Order* provided limited technical guidance for evaluating channel substitutions of the type proposed by WMTW. Many believed that *OET Bulletin No. 69* would provide the methodology necessary to evaluate alternative DTV channel proposals and requested that the FCC allow

additional time to prepare technical showings using the bulletin's methodology. The FCC granted the request for additional time, but *OET Bulletin No. 69* did not provide a methodology for evaluating DTV coverage and interference that could be readily applied in cases such as this. The development of practical Windows- or DOS-based computer tools based on the *OET Bulletin No. 69* methodology will take far longer than the additional time allowed by the FCC for analysis. Even deployment of a UNIX-based computer system capable of directly executing the FCC-written computer code is expected to take longer than the additional time permitted by the FCC for analysis.

The National Telecommunications Information Agency (NTIA) has developed a DTV propagation model based on a methodology that is similar to the *OET Bulletin No. 69* methodology, and WMTW has used the NTIA model to evaluate its proposal to modify the reference coordinates, ERP, and antenna radiation center HAAT associated with the DTV channel 46 allotment made at Poland Spring for use by WMTW-TV. A summary of the results of the WMTW study is presented herein.

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The reference coordinates for the Poland Spring DTV channel 46 allotment are 44° 16' 13" North Latitude, 71° 18' 13" West Longitude,¹ and the associated ERP and antenna radiation center HAAT are 245.7 kilowatts (kW) and 1173 meters. An application is pending (FCC File Number BPCT-960422KE) to relocate the NTSC channel 8 WMTW-TV operation to a new site identified by geographic coordinates 43° 50' 33" North Latitude, 70° 45' 22" West Longitude.¹ In the pending application, WMTW proposes to operate NTSC WMTW-TV with ERP of 316 kW and antenna radiation center HAAT of 610 meters. Using the methodology described in *OET Bulletin No. 69*, WMTW has determined that the WMTW-TV NTSC coverage area shown in the pending application would be replicated by operation on the allotted DTV channel 46 with reference ERP of 3236 kW and antenna radiation center HAAT of 610 meters.

Coverage and interference studies made using the NTIA propagation model show that operation of WMTW-TV on DTV channel 46 at the DTV

¹ Referenced to 1927 North American Datum (NAD 27).

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allotment reference site with 245.7 kW ERP and 1173 meters HAAT is predicted to cause DTV interference to 1,301,000 persons in 2,130 square kilometers. The studies also show that operation of WMTW-TV on DTV channel 46 with ERP of 1,000 kW and antenna radiation center HAAT of 610 meters at the pending application site is predicted to cause DTV interference to 1,252,000 persons in 2,520 square kilometers. Thus, operation of WMTW-TV at the pending application site as specified herein will reduce the population predicted to receive interference from the WMTW-TV DTV operation by 49,000 persons. Further, DTV channel 46 operation at the pending application site with maximum permissible DTV facilities is not predicted to cause interference to any authorized NTSC station.

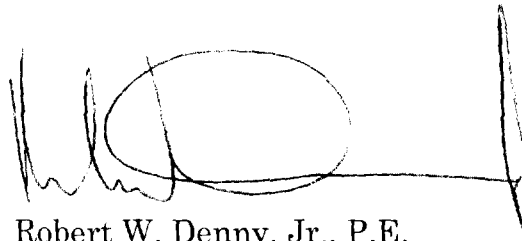
WMTW expects that further study using a TV coverage and interference prediction model that adheres strictly to the *OET Bulletin No. 69* methodology will yield virtually the same results as the NTIA model with respect to the use of DTV channel 46 at the WMTW-TV pending application site. As operation on DTV channel 46 at the site specified in the pending application

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to relocate NTSC WMTW-TV will decrease DTV interference and facilitate implementation of DTV at WMTW-TV, WMTW requests that the DTV channel 46 reference coordinates be changed to the geographic coordinates specified in the WMTW-TV pending application file, FCC File Number BPCT-960422KE, as amended, and that the ERP and antenna radiation center HAAT for the WMTW-TV DTV channel 46 operation at Poland Spring be changed to 1000 kW and 610 meters, respectively.



Robert W. Denny, Jr., P.E.

Subscribed and sworn to before me this 21st day of August, 1997.



Jennifer J. Mateik
Notary Public, District of Columbia
My commission expires June 30, 2001